Primary Health Care for Children and the Importance of Gender in Ranchi, India

a student project by

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September 2004

Abstract

Background. 10 million children died in developing countries in 2002. Since the seventies *Health for All* was made as an attempt at a more systematic global health policy. In India mortality in girls exceed that of boys. This inequity is thought to arise from the preferential treatment of boys in health care-seeking and nutrition.

Materials and methods. This paper discusses primary health care for children in Ranchi, India, and the meaning of gender when it comes to seeking a doctor. The paper is based on literature review, interviews and qualitative and quantitative observations at YMCA Health Care Centre and by a private practitioner.

Results. YMCA in Ranchi works for integrated primary health care among the poor. We observed immunization, health-talks with parents, consultations and hospitalisation. Limited resources and lack of knowledge among parents complicated the work. The private practitioner treated patients able to pay. Studies from different parts of India have shown gender discrimination in health care. We registered data from 303 children. There was no statistical significant link between gender and type of office. However, there was a tendency towards more boys being brought to the private clinic; 60, 5 % of these patients were boys and 39, 5 % were girls.

Interpretation. To reach the goal *Health for All*, well-functioning integrated health-services must be developed.

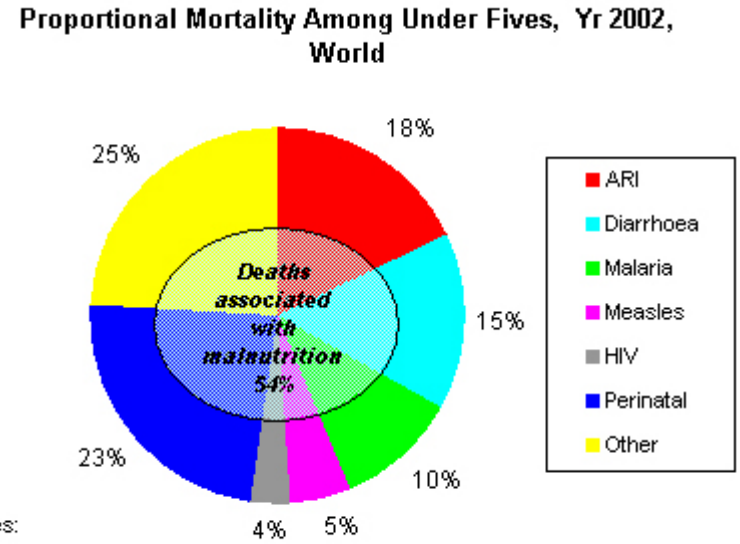
We did not find clear evidence of gender discrimination when it comes to health care, even though studies from other parts of India have shown this.

Contents

1. Introduction

1.1 Global child health

10 million children under the age of five died in developing countries in 2002. The leading causes of mortality were perinatal conditions, acute respiratory tract infections, diarrhoea and malaria. Half of the deaths were associated with malnutrition. Infectious and parasitic diseases accounted for six out of ten deaths (1).



1.2 Gender and child health

Throughout the world, child mortality is higher among male than female children, with only a few exceptions. However, in China, India, Nepal and Pakistan, mortality in girls exceed that of boys. This inequity is thought to arise from the preferential treatment of boys in family health care-seeking behaviour and in nutrition (1).

1.3 Primary health care

In the mid-seventies the thought of “Health for All” was made as an attempt at a more systematic global health policy. In 1977 a formal decision to work for the goal of *Health for All* by the year 2000 was taken. In 1978 an international primary health care conference took place in Alma-Ata, Kazakhstan, and the Declaration of Alma-Ata outlined the steps to meet this challenge (2). The Declaration of Alma-Ata acknowledges that health depends on economical and social factors, describes the

social structures necessary for achieving health, and gives primary care a clear priority within health care:

Primary health care includes at least; education concerning prevailing health problems and the methods of preventing and controlling them; promotion of food supply and proper nutrition; an adequate supply of safe water and basic sanitation; maternal and child health care, including family planning; immunization against the major infectious diseases, prevention and control of locally endemic diseases; appropriate treatment of common diseases and injuries; and provision of essential drugs (2).

Among the essential elements of primary health care, one needs to start with information, water, sanitation, housing and food. One then proceed to MCH and family planning, immunizations and further also to the control and treatment of diseases and injuries.

To follow up the Declaration of Alma Ata, a new world-wide network called *People's Health Movement* got established in Bangladesh in 2000. The organization developed a document called *People's Charter for Health* (3). In Antwerpen, the *Health Care for All* declaration was formulated in 2001 (4). In 2003, 25 years after Alma Ata, the new Director-General of WHO, Mr Lee Jong-Wook, underlines the importance of fulfilling fundamental ethical values and obligations connected to *Health for All* (5).

Mother and child health

An integrated part of the global primary health care is the mother and child health care (MCH). It includes both prevention and treatment of diseases. Vaccination, treatment of common diseases, antenatal care, family planning and general health education are parts of the work. The MCH-work is often organized in MCH-clinics. Practical demonstrations of how to make oral re-hydration solutions (ORS), and how to use local food as additional food for infants, are often connected to the activities at the clinic.

Immunization

In 1974, the WHO formulated a program named *Expanded Programme on Immunization* (EPI) (6). The original six EPI vaccines polio, measles, BCG and DPT (Diphtheria, Pertussis, Tetanus) were chosen on the basic of the public health importance of the diseases to be prevented, the existence of a vaccine proven safe and efficacious, and of the low cost of the vaccine.

1.4 Aim of the Study

We wanted to study primary health care for children in a developing country. We also wanted to study the meaning of gender when it comes to bringing the child to a doctor.

Dr. Ajay Ghosh examines a girl.

2. Materials and methods

We spent the summer of 2002 in Ranchi, the capital of the state Jharkhand in East India. Jharkhand is one of the poorest states in India with an income of 4100 Rupees (= 90 USD) per capita per year. The state has 27 million inhabitants. The population consists of Hindus, Muslims, Christians and Tribe-people. Literacy in the state of Jharkhand is 54 % overall. For males the literacy rate is 67 % and for females 39 % (7).

2.1 Materials

The study was carried out in two primary health care institutions; at Ranchi YMCA Health Care Center and at a private paediatric practice run by Dr. Ajay Ghosh.
The YMCA Health Care Centre is situated in Islam Nagar, a Muslim area and one of 13 slums in Ranchi. The clinic offers low-cost primary health care for poor people. Dr. Ghosh is a paediatrician who runs two private practices in Ranchi.

Mainly poor people attended the YMCA-clinic. All children below the age of 12 were included in the study, and none was excluded. Mainly patients from the middle- and upper class attended the private practitioner's clinic. These were infants or children only. None of these were excluded.

2.2 Methods

Both literature review, qualitative and quantitative methods were applied to study the various issues.

Literature

The literature was found in international, Indian and Norwegian books and journals, identified through search in Medline and in key references in the papers identified.

Qualitative methods

Participant Observation

We participated as observers in health-work and other activities run by the YMCA each day for five weeks, and joined consultations with the private paediatrician for nine days.

Key Informant Interview

We got key-information from three of the doctors with whom we spent time, two women and one man. The interviews were open and unstructured. Two of the interviews lasted for approximately an hour. The third informant got interviewed several times, for about four hours all together. The informants were aware of the purpose of the study and gave their answers in a co-operating and communicative manner.

Group Discussion

We joined one meeting for women in a slum area called Kata Toli. The meeting was arranged by the YMCA Health Care Centre. A group of 50 women was at present. The topic of the meeting was how to prevent diarrhoea. In the end of the meeting we had a group discussion on gender and health care. The women were informed of the purpose of the discussion.

Group discussion.

Quantitative Methods

Directly Structured Observation

By observing the clinicians at work we collected data on gender, diagnosis, further investigations and medical treatment. We supplied our observations with information from the record-book at the YMCA-clinic.

We defined alternatives for each variable:

- Gender: Boy / Girl
- Diagnosis: Respiratory tract infections
  Gastro-intestinal infections
  Skin infections
  Tuberculosis
  Malaria
  Urinary-tract infections
  Injuries
  Other
- Further investigations: Yes / No
- Medical treatment:
  None
  Antibiotics
  Malaria-medicines
  Helmint-medicines
  Tuberculosis-treatment
  Other

Data Analyses

Quantitative data was organized and analysed in a computer using XXL and SPSS. Frequency-analyses and chi-square-tests were applied to analyse the data.

3. Results

3.1 Literature

Primary health care in India

India is a federal democracy. In 2002 the total population was 1 050 millions. Life expectancy in 2002 was 60 years for males, and 62 years for females (8). The Indian health policy is formulated in federal 5-year plans. These are based on twelve national vertical programmes, and resources are bound to each programme. Most important is the Family Welfare Programme (including maternal and child health care and family planning). This programme alone receives one third of all health budgets. Another third is allocated to the Programme for Water and Sanitation. Other programmes include the extended programme of immunization, programmes of health care training and services, and national programmes against tuberculosis, malaria and goitre.

Health-services in India are built on the British colonial tradition, with stepped care from the village level to specialised care. The smallest health care unit is the village, a sub centre covering 10 000 people. The sub centre is often a building with medical equipments, drugs and a delivery room. It is staffed with two Multipurpose Health Workers, who are implementing programmes of immunization, maternal health care, programmes against tuberculosis and others. They treat minor injuries, maintain statistics, and use some 20 essential drugs for the treatment of common diseases.

The next level of care is the Primary Health Centre, covering between 70 000 and 100 000 inhabitants. These centres work with prevention and cure, have an office for environmental health, and take patients from sub centres. Approximately four physicians are working at a Health Centre. They have laboratory facilities to diagnose tuberculosis, urinary tract infection, leprosy, malaria, and a refrigerator for vaccines. Their tasks are, among others; to give intravenous re-hydration, take care of snakebites, fractures, and some more complicated deliveries (9).

The public health services are complemented by private organisations. Non-governmental organisations have built health centres, hospitals, and schools to train health care personnel. According to the criteria of WHO, India has a surplus of physicians with 48 doctors per 100 000 (8), and private practitioners abound in the cities.

India has strived toward strong primary health care, but the function of a principally healthy structure is undermined by lack of personnel and economic constraints (9).

Child health and the issue of gender in India

In the Indian context, there is a strong preference for sons. This preference is influenced by socio-economic and cultural factors, such as the son being responsible for carrying forward the family's name and occupation. Sons are desired because they are considered as a source of support during old age. They are also desired for performing religious rites at the time of cremation and subsequently. The practice of dowry and daughters being viewed as "paraya dhan" (to be married and sent away) is yet another reason why sons get rated higher than daughters (10).

The sex ratio, calculated as number of girls per 1000 boys in the 0-6 age group, declined from 945 girls per 1000 boys in 1991 to 927 in 2001 (7). According to the WHO, child mortality in India were 95 females per thousand and 87 males per thousand in the year 2002. This refers to child mortality risk, which is defined as the probability of dying before the age of 5 (8).

The practice of antenatal selection and termination of female pregnancies in India has persisted, despite the banning of sex determination tests under the Pre Natal Diagnostic Techniques Act 1994. The number of ultrasound machines in India is estimated to be nearly 100 000 (11). After birth mortality is also higher among female infants and girls. Various studies have shown that compared with boys, female children are often brought to health facilities in more advanced stages of illness, are taken to less qualified doctors when they are ill, and have less money spent on medicines for them.

A study in Punjab showed that during the first two years of a child's life, parents spent 2.3 times more on health care for sons than for daughters (12). A study from Delhi analysing data for the period 1997-2001, showed that there were an excess of female deaths due to easily treatable conditions like diarrhoea. There were also a large number of unexplained female deaths, which might be considered as deaths under suspicious circumstances (13). However, a study from Tamil Nadu showed that that there was no significant gender difference in episodes of illness, and concluded that gender difference was not significant in the overall health care by the parents (14).

3. 2 Qualitative methods

3.2.1 Participant observation

A. YMCA Health Care Centre

The health-service for children run by the YMCA in Ranchi offered preventive care like immunization and health talks, simple diagnostic work, treatment and referred patients to hospital. Dr. Jenny Jha was in charge of the centre supported by two other doctors. Two nurses, two midwifes and one laboratory technician worked as health-personnel. Consultations were free, based on patients dropping in. Medicines were sold to self cost prices. The clinic had a few deliveries, equipment for intravenous re-hydration and a small laboratory.

Immunization

WHO's guidelines on *Expanded Program on Immunization* was followed. Special days for immunization were organized. In the morning someone from the centre informed people in the slum that they could have their children vaccinated that day. The parents had to pay 10 Rupees (= 0, 2 USD) per vaccine. Each child had its own health-card. Information about the child's vaccines was written on this.

Health-talks with parents

Every Friday a health-talk was arranged in one of the 13 slums in Ranchi. Different slums got visited every week. The intention with the visits was to teach women basic hygiene and health-care, and how to prevent common diseases. Women in the slum were informed about going to the school just before the health-talk started. One of the doctors or the nurses led the talk, and described the problems and situations in a clear and visual way. The information was related to the women's everyday-life, and in the end it became more like a dialog between the women and the health person.

We joined two health-talks on diarrhoea. The women were told of symptoms, the importance of getting enough to drink, how to make Oral Re-hydration Solution (ORS) with boiled water, sugar and salt, and how to avoid food getting infected by not storing leftovers. They also learned that diarrhoea is one of the most important killers of children in the world. They learned how to avoid diarrhoea by using clean water, the importance of breast milk, shoes on the toilet, keeping their nails short, wash hands, and keep it clean around their houses.

Consultations

Outpatients could come and see a doctor in the mornings and in the afternoons. The patients were first registered by one of the nurses. All the patients had their own registration-card, stored at the centre. After being registered they had to wait until the doctor was ready. Confidentiality was no rule, and the consultations took place with open doors and the queue going into the office. The patient or a relative gave the history, the doctor asked a few questions, did a simple investigation, and prescribed treatment to almost every patient. Data on name, day of birth, diagnose and treatment got registered in a journal-book. The doctor had a stethoscope and equipment for measuring blood pressure. Further investigations were done when tuberculosis was suspected. The patient was then sent for X-ray, and a sputum-test was analysed at the health centre. Patients with more severe conditions were sent to the University Hospital in the city. Limited resources in the office and few possibilities for further investigations often made the doctor give treatment for many conditions at the same time.

Antimicrobial drugs were often prescribed even though the doctor was quite sure that the child had a viral infection. Broad-spectered antibiotics were almost always used. The patients were often too poor to afford the whole cure of antibiotics. They bought as many tablets they could afford, which often meant ending the cure after just a few days. Sometimes the patients could not afford treatment at all. The clinic had some medicines they then gave for free to patients like this. It was for instance vitamin B and samples of medicine they had received from pharmaceutical companies.

Hospitalisation

Some of the patients needed further investigations and treatment. Those patients were registered, and the YMCA's ambulance once a week took people to the University Hospital, the Rajendra Medical College Hospital. Mrs Jha and one of the nurses guided the patients to different departments in the hospital, since most of the patients were illiterate. Patients who were admitted to the hospital received free treatment. The family had to stay with the patient, cook food and help with other practical problems. Other patients came for investigation only, like blood tests and X-ray.

Other activities

YMCA ran several schools and vocational training centres in the different slum areas in the city. It arranged voluntary sterilisation camps and had programs on sexual awareness and use of condoms. We visited four different schools, two vocational training centres, worked as assistants at a sterilisation camp and joined a meeting on sexual awareness.

B. Private health care

Dr. Ghosh offered primary health-care for children whose parents were able to pay for seeing a doctor. The patients had to pay 100 Rupees (= 2 USD) for the consultation and on top of that pay for treatment and medicines as well. The patients had open return in ten days after the first consultation. The children's weight was first registered. Then Dr. Ghosh took his patients' history, asked questions, did a clinical examination, remitted for further investigations and prescribed treatment when necessary. The equipment in his office was a stethoscope, a small scale for infants and a bigger scale for children able to stand, a torch-light and a bench. Patients were sent to deliver a specimen of urine at a nearby laboratory when urinary tract infection was suspected. Some children were sent for blood testing, others for X-ray or a CT-scan. Some patients were not able to pay for these investigations. Treatment was then given based on the clinical diagnosis.

3.2.2 Results from key informant interviews with 3 doctors

Socio-economical conditions

The lack of population control was regarded by all doctors as one of Ranchi's biggest challenges. Overcrowded households and neighbourhoods, unemployment and lack of teachers and schools were common problems. Water supply, sanitation and waste disposal was not organized in the slum areas of the city.

Parents knowledge

Parents often had problems with reading and understanding written health-information, information about how to prevent illness, when to seek a doctor, and how to take prescribed medicines. According to one of the doctors, the parents also had

problems with knowing the difference of minor illnesses and life-threatening conditions. Simple skin-problems sometimes got more attention than serious malaria.

Preference of sons or daughters

In general, the parents preferred to have sons, especially as the first child. If a family had two girls, and the mother again conceived, the parents often decided to have an ultrasound-diagnostic of the next child's gender. If the third child was a girl, they considered having an abortion.

There are several reasons why the parents prefer sons. A son can become the head of the family, while a daughter leaves the family when she gets married. The sons take care of their parents, and carry on the family name. The dowry for a girl-child can be a big burden for the parents, and is one of the main-reasons for why boys are preferred. Although illegal according to Indian laws, dowry is common among Hindus and is getting more common among Christians, while most tribe-people do not practice it. Muslims often get married inside the family, dowry is not demanded, but boys are preferred while they can work outside the house.

Priority of health care

Our three informants claimed that when a child is born, the parents in general give boys and girls the same care, but the socio-economical status of the family can decide whether they are treated equal or not. Among poor families, the sons can be given more food and care. More girls than boys in poor families are weak, undernourished and anaemic. Both boys and girls are brought to doctors when health-care is needed, but the girls are often more ill when they come to see a doctor. Further investigations and treatment cost money, and in general boys were given priority here as well.

3.2.3 Results from a group discussion in Kata Toli

The group discussed questions related to sons and daughters, preferences of gender, dowry and health care for their children.

Preference of sons or daughters

The women said they had no preferences of gender themselves, but their mother in law preferred sons to get the family name brought on. A girl would be able to do housework and understand the mother's situation and problems, while a son would

stay in the family and take care of his parents financially. He would also perform the religious Hindu-ritual of burning his mother after her death.

Priority of health care

The mothers said they would spend the same amount of money on both a son and a daughter if they got ill, and borrow from others if they could not afford to pay the doctor. They would not wait longer before they brought a daughter than a son to the doctor.

Dowry

They said they would not demand dowry from a family if a girl was going to marry their son, but many of them had to pay dowry themselves when they got married.

3.3 Quantitative methods

Data Analysis

We registered data from 303 children, 152 in the private clinic and 151 at YMCA Health care centre. 169 (56 %) of the patients were boys, while 134 (44 %) were girls. In the private clinic 92 (60, 5 %) of the patients were boys and 60 (39, 5 %) of the patients were girls. In contrast, at the YMCA 77 (51, 0 %) were boys and 74 (49, 0 %) were girls (figure 1). There was no statistical significant link between gender and type of office (chi-square-test, p-value = 0,095).

In total 35, 0 % of the children got diagnosed with respiratory tract infection, 36, 5 % of the boys and 32, 8 % of the girls. 16, 5 % got diagnosed with gastro-intestinal infection, 17, 8 % of the boys and 14, 9 % of the girls (figure 2). Statistical tests (chi-square-test) showed no significant link between diagnosis and gender.

Totally 106 patients got diagnosed with respiratory tract infection. 84, 9 % of them got antimicrobials.

Figure 1 Gender and office

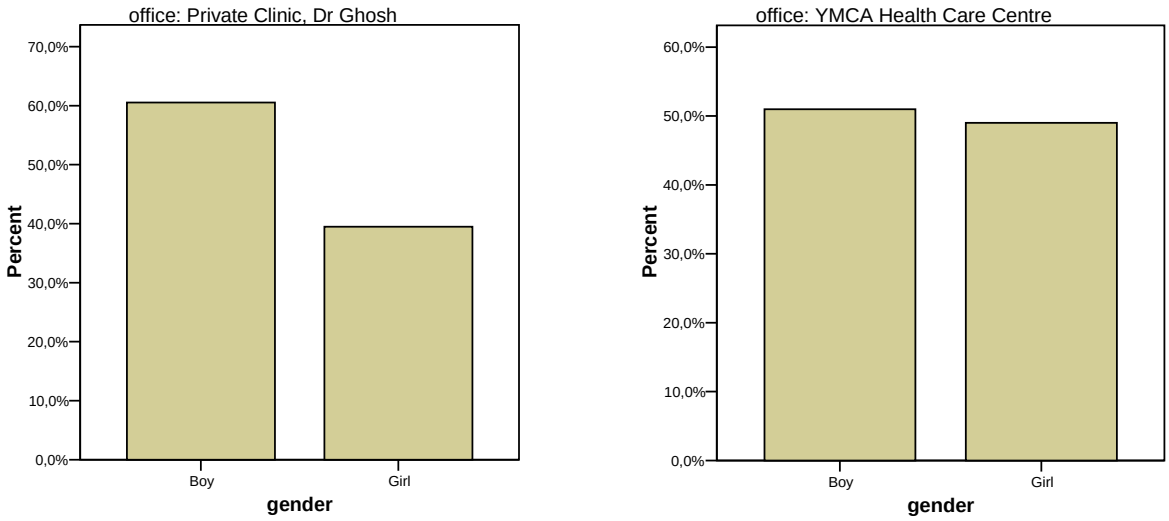
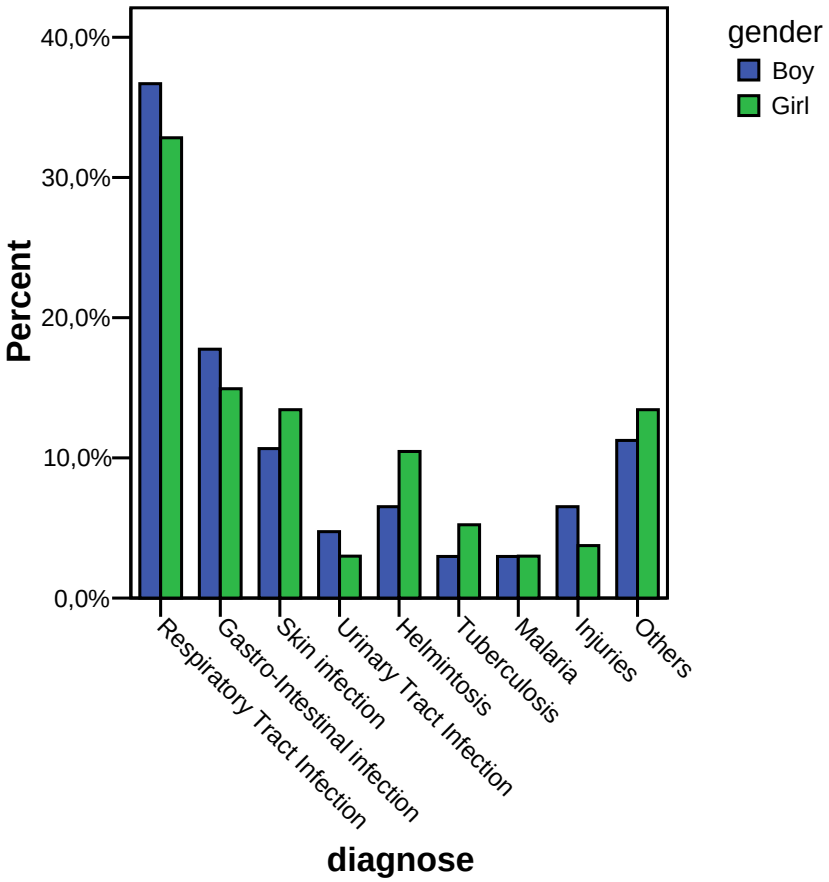


Figure 2 Gender and diagnose



4. Discussion

Before our stay in Ranchi, our intention was to find out whether the boys' health was given priority in the families and among the doctors. During our stay and afterwards we decided to discuss primary health care for children as well, since we observed different parts of primary health care.

4.1. Health services

Private practitioners and health-institutions, as well as non-governmental organisations, complement the Public health-services in India (9). The private institutions are for people able to pay, while the NGOs often work among poor people. The Government of India has not fulfilled it's commitment of "*Health for All by 2000*". Primary health care services are becoming more and more difficult to obtain, especially for people living in urban slums, villages or remote tribal regions. The Governments proportion of expenditure on public health services has been declining in successive years (3). Both private institutions and NGOs follow ideas from international declarations on health services, and run programmes on mother and child-health and immunization.

We observed a non-governmental organization working for integrated primary health care. Immunization and health-talks with parents were parts of their preventive work. Consultations and hospitalisation dealt with the acute cases. Vertical programmes like immunization and treatment of tuberculosis were implemented, but only as part of the work. Schools and vocational training centres in the slum areas tried to improve the children and youth's ability to take care of them selves in the future. Sterilisation camps and sexual awareness-programs were organised as attempts to decrease the population.

The primary health-care for children in Ranchi was limited due to challenging circumstances. There was a lack of essential equipment and effective routines among the health-workers. The socio-economical conditions in the slums, illiteracy and lack of education and basic health-knowledge among parents made it difficult to maintain a sufficiently good and safe health care. Many of the parents did not seem resourceful enough to make plans for the future, and this made compliance more complicated.

4.2 Gender

In our literature review we found that there are more males than females in India (7). One of the reasons for this might be the fairly common practice of antenatal termination of female pregnancies. After birth mortality is also higher in female infants and girls. This is often explained with gender discrimination in health care. Studies from different parts of India have showed discrepancy in gender discrimination in health care (12, 13, 14). Discrimination in health care was found in states like Punjab and Delhi, but not in Tamil Nadu. An explanation to this might be that the preference for sons seems to be greater in northern states like Punjab than in southern states like Tamil Nadu, as indicated by more females per 1000 males in the southern states (7).

Our key-informants said that parents in Ranchi preferred to have sons. This is consistent with the opposite male-female ratio in India compared to other countries (7). They also described selective abortions of girl-foetus. They meant care and priority of health-services between boys and girls depended on the socio-economical status in the family. Among the poor, boys were given more priority. They also claimed that girls were often in worse conditions than boys when they came to see a doctor.

We observed, however, few differences in the percent distribution of diagnosis for boys and girls. Neither was there a significant difference in number of boys and girls brought to the different types of clinics (private versus NGO). However, there was a tendency towards more boys being brought to the private clinic. This may indicate that more money was spent on healthcare for boys. The number of children registered was too small to allow for a general conclusion.

The views of the women in the group at Kata Toli were not in agreement with what we found in the literature and the statements given by our key informants. The women said they had no preference of gender, and that they would spend the same amount of money on healthcare for girls and boys. An implication of generalized sex bias is that discriminatory behaviour need not occur at a conscious level. Parents in a society might simply have internalized certain norms that lead them to give better care to their sons than their daughters. On the contrary, it has been proposed that discrimination against girls is not a generalized pattern, but mainly affects girls that already have sisters (12). The statements from our key-informants support this. Parents might treat their firstborn boy and girl equal, but when it comes to the second

or third girl, they might give her less priority. Another reason for the disagreement in the answers might be that the women were answering what they thought we would like to hear.

4.3 Methods

Qualitative methods give a more nuanced description of the various issues and casual relationships, while quantitative methods support theories by quantifying data. We found it important and necessary using both types of methods in our study. However, we want to discuss some aspects which might have influenced the results of our study.

The literature study was done to support the field observations after the visit to India and was not done systematically. A broader review of the literature before departing to the field, in particular on the gender issue, might have given us a better focus on the gender issues and the methodological problems we encountered.

A well-known problem when it comes to participant observation is that one's own prejudices might influence what actually is observed and the interpretations of this. Our observations might have been affected by our experiences from western health care. We may have had negative attitudes to how health care in a developing country is organized.

Our key informants were experienced doctors. However, they might have had personal opinions influencing their views.

The group discussion went on in a large group with an interpreter. The setting for the discussion was not optimal, and we might have received answers of better quality if the group had been smaller.

To be able to make general conclusions on health care and diagnoses, a larger number of children should have been registered. We did not register data on weight and height. Those parameters are sensitive indicators of nutritional state, and could have given useful information about an eventual difference between boys and girls.

4.4 Conclusion

The Government of India has not been able to fulfil all its commitments of *Health for All by 2000*. Private practitioners and non-governmental organizations give important supplements to public health services. But these supplements are not sufficient to ensure health care for all. We observed a non-governmental organisation trying to

provide integrated care. Lack of resources limited their work among the poor, but they succeeded helping parts of the population. People able to pay seemed to receive adequate medical care in private institutions. Primary health care for all children in Ranchi in the future might be possible, but to reach the goal *Health for All*, the Indian government must more actively develop and finance a well functioning integrated health-service.

We did not find clear evidence of that a girl is given less priority than a boy when it comes to provision of health care, even though studies from other parts of India have shown this. Improved access to health care and education of health professionals on gender issues could lead to a further improvement in child health and reduce child mortality in India.

5 Acknowledgements

We want to thank Mrs. Jenny Jha, Ranchi YMCA and Dr. Ajay Ghosh for their great hospitality and help with this study. We also want to thank Erik Bøhler and Karl-Olaf Wathne for good directions before and after our stay in India.

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